





# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/718,595	11/21/2000	Dan Kikinis	P1541D1	5336	
24739 7	590 11/18/2002				
CENTRAL COAST PATENT AGENCY			EXAMINER		
	PO BOX 187 AROMAS, CA 95004			PRIETO, BEATRIZ	
			ART UNIT	PAPER NUMBER	
			2142	11-	
			DATE MAILED: 11/18/2002	. 16	

Please find below and/or attached an Office communication concerning this application or proceeding.

Tu

	_	The			
	Application No.	Applicant(s)			
	09/718,595	KIKINIS, DAN			
Office Action Summary	Examiner	Art Unit			
	B. PRIETO	2142			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REP THE MAILING DATE OF THIS COMMUNICATION  - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a re  - If NO period for reply is specified above, the maximum statutory perio  - Failure to reply within the set or extended period for reply will, by state  - Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).  Status	I.  1.136(a). In no event, however, may eply within the statutory minimum of t id will apply and will expire SIX (6) M ute, cause the application to become	a reply be timely filed  hirty (30) days will be considered timely.  DNTHS from the mailing date of this communication.  ABANDONED (35 U.S.C. § 133).			
1) Responsive to communication(s) filed on $09$	9/06/02 <u>Amendment C</u> .				
2a)⊠ This action is <b>FINAL</b> . 2b)□ □	This action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims					
4) Claim(s) 16-33 is/are pending in the applica	tion.				
4a) Of the above claim(s) is/are withdr	rawn from consideration.				
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>16-33</u> is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and	l/or election requirement.				
Application Papers					
9) The specification is objected to by the Examiner.					
10)☐ The drawing(s) filed on is/are: a)☐ acc					
Applicant may not request that any objection to					
11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner.					
If approved, corrected drawings are required in reply to this Office action.					
12) The oath or declaration is objected to by the Examiner.					
Priority under 35 U.S.C. §§ 119 and 120					
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).					
a) ☐ All b) ☐ Some * c) ☐ None of:					
1. Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents have been received in Application No					
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).					
a) ☐ The translation of the foreign language provisional application has been received.  15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.					
Attachment(s)					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) 🔲 Notice	w Summary (PTO-413) Paper No(s) of Informal Patent Application (PTO-152)			



Art Unit: 2142

#### Detailed action

1. This communication is in response to amendment filed 09/06/02, claims 16-33 remain pending.

## Claim rejection 35 U.S.C. §103

- 2. Quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejection set forth in the Office action may be found in previous office action.
- 3. Claims 16-17, 19, 21-23, 25-26, 28, 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lawler et. al. (Lawler) U.S. Patent No. 5,805,763.

Regarding claim 16, Lawler teaches a system (Fig. 1) including;

displayable indicia from server (26) at the head end (12) (col 3/lines 45-col 4/lines 10) which includes displayable indicia associated with commands from server (30) (col 4/lines 11-22, Figs. 6, and 8-9, reminder/record tags), displayable indicia associated with commands from server (32) (col 4/lines 24-35, Figs. 3 and 6, video clips) and from server (34) (col 4/lines 36-51, preview window (110), icons and record/reminder tags, and includes program time guide information, col 8/lines 35-53, Figs. 3 and 6); displayable indicia from server (26) is modulated (38) and combined (42) with standard analog video signal from feed (40), (i.e. pre-associated) at the head end (12 on Fig. 1) and provided as a displayable data stream to the user's viewer station controller (18) for display on video display (20) (col 5/lines 4-29), selected displayable indicia is further associated with commands including actions executed (col 8/lines 5-17, col 10/lines 25-50);

viewer stations include a interactive station controller (18) also referred as a set top box (col 5/lines 38-48), comprising;

a broadband receiver to receive the displayable data stream from head end (12) (analog video receiver, i.e. broadband signal receiver, col 3/line 30-67, col 5/lines 30-37);

circuitry to select the future programming information, including the displayable indicia, and to cause it to be displayed (tuner, col 10/lines 25-58, tuner functions, col 5/lines 57-65, focus frame (102) selection of programming information, col 8/lines 5-17, 54-56, selection of programming information causing displayable indicia to display, col 10/lines 16-62);

and remote control (22) (user-operable apparatus) (col 3/lines 35-36, col 5/lines 38-43) to select displayable indicia (col 10/lines 16-41);



Art Unit: 2142

characterized in that, in response to selecting the displayable indicia, the command associated with the selected displayable indicia is executed (col 10/lines 16-59, launching applications associated with selected channels, record, order, or reminder executable operations associated with corresponding record, order reminder buttons, col 10/lines 65-col 11/line 32, execute when selected, col 13/lines 8-26);

however the above-mentioned prior art of record teachings of a device for receiving analog/digital video signal such as convention analog video signal (i.e. broadband video signal) is not denoted a "broadband receiver";

It would have been obvious to one ordinary skilled in the art at the time the invention was made to utilize Lawler's teachings to implement the above discussed system performing the same functions as claimed, motivation would be to provide an interactive program guide generated at the head end from multiple sources, delivering to the user an program guide that enable interaction with the guide to select, record or order future programming.

Regarding claim 17, execution of the command comprises switching the display to a channel associated with the future programming (Lawler: col 11/lines 36-44).

Regarding claim 19, broadband receiver comprises a satellite data link adapted to download a satellite-broadcasted data stream, and the information is received via the satellite data link (Lawler: col 3/lines 54-67).

Regarding claim 21, the future programming information is received along with television programming (Lawler, information from server 26, including future programming information from server 34: col 4/lines 1-10, is combined with television programming i.e. conventional analog video information: col 3/lines 61-67 to form a composite signal made available to viewers station: col 5/lines 4-7, 17-28, television programming, col 3/line 30-33, 61-67).

Regarding claim 22, future programming including command and displayable indicia associated with command, as discussed above, and further said set-top (18) includes memory system (60) for storing the future programming information (Lawler: col 9/lines 63-col 10/line 3).

Regarding claim 23, a satellite data link stream as discussed on claim 19, and further including a land-based modem by one of the satellite data link and the land based modem (Lawler: col 5/lines 34-37).





Art Unit: 2142

Regarding claim 25, comprising the method including the features comprised in a set-top box discussed on claim 16, discussed above, rejected for obviousness under 35 U.S.C. 103(a), this same rationale is also applied to the method claims, claimed in terms of function, property or characteristics.

Regarding claim 26, execution of the command comprises switching the display to a channel associated with the future programming (Lawler: preview operation, col 4/lines 36-46, tuning to a channel associated with the program guide display, col 10/lines 16-29 or go to show, col 10/line 42-53).

Regarding claims 28 and 30-32, comprising the method associated with the set-top box apparatus are substantially the same as discussed on claims 19 and 21-23, respectively, rejected for obviousness under U.S.C. 103, this same rationale is also applied to the method claims, claimed in terms of function, property or characteristics.

4. Claims 18, 20, 24 27, 29 and 33 are rejected under 35 U.S.C. §103(a) as being unpatentable over Lawler et. al. (Lawler) U.S. Patent No. 5,805,763 in view of Eyer U.S. Patent No. 5,982,445.

Regarding claims 18, 20 and 24, portion said information (displayable data stream) received by satellite data link (Lawler: col 3/lines 54-57), however prior art does not explicitly teach where said information (displayable data stream) received by satellite data link, particularly comprises web pages in a markup language.

Eyer teach receiving by a television receiver display data (col 5/lines 13-26), said display data coded according to a markup language (e.g. HTML), display data also including future program scheduling information (col 4/lines 33-57) by a satellite data link receiver by a television receiver (col 8/lines 39-52);

It would have been obvious to one ordinary skilled in the art at the time the invention was made to provide a scheme for adapting existing transmission and receiving equipment including set-top decoders and communication protocols such as those for transmission of digital television signals via satellite and/or cable plants for the display of web pages in view of its rapidly increasing use, as suggested by Eyer.

Regarding claim 27, 29 and 33, comprising the method associated with the set top box apparatus are substantially the same features as discussed on claims 18, 20, and 24, respectively, rejected for





Art Unit: 2142

obviousness under U.S.C. 103, this same rationale is also applied to method claims, claimed in terms of function, property or characteristic.

5. Additionally, claims 16-17, 19, 21-23, 25-26, 28, and 30-32, are rejected under 35 U.S.C. 103(a) as being unpatentable over Harper et. al. (Harper) in view of Coleman et. al. (Coleman) U.S. Patent No. 5,844,620.

Regarding claim 16, Harper teaches a set-top box (600 of Fig. 3), (col 6/lines 40-41, col 3/lines 66-col 4/line 5), comprising;

receiver coupled to a broadband bandwidth channel for receiving digital/analog data, e.g. conventional television broadcast signals (i.e. a broadband receiver) (col 3/lines 44-col 4/line 5); receiving by said receiver, displayable data stream (col 4/lines 13-16, displayable broadcast stream, displayable interactive data, col 6/lines 16-47, displayable graphic data stream, col 5/lines 41-46, received col 7/lines 19-46), displayable data stream (video, audio and graphics from a head end, col 6/lines 16-25, including displayable data stream col 6/lines 31-35) and command(s) associated with a displayable indicia (col 7/lines 19-22, commands, col 19/lines 15-21, commands associated with displayable indicia, col 8/lines 1-14, 34-42, col 9/lines 14-19, displayable data stream col 8/lines 63-col 9/line 5);

circuitry (616 of Figs. 3 and 7, col 5/lines 6-11) for selecting in the displayable indicia stream (col 12/lines 17-34, displayable data stream col 5/lines 67-col 6/line 9) and to form displayable data stream (col 12/lines 17-34, col 18/lines 39-42), the display including the displayable indicia (col 17/lines 51-59);

user-operable apparatus (604 of Fig. 1, col 6/lines 41-42) to select the displayable indicia (col 6/lines 49-col 7/line 6);

in response to selecting the displayable indicia, the command associated with the selected indicia is executed (col 12/lines 17-34, col 18/line 59-col 19/line 6), in response to a selection of displayable indicia associated with a command is execution (col 7/lines 34-46, 58-67, executable commands associated with displayable indicia, col 8/lines 1-14, 50-62); however Harper does not explicitly teach where displayable data stream including a displayable data stream which further includes future programming is received;

Coleman teaches receiving in real time video data including displayable data stream including future programming (video and graphic blended in received stream, col 2/line 45-55), data stream including "demand data stream" further including future programming (i.e. schedule guide) is received, (col 4/lines 60-col 5/line 3), received (32), demultiplexed (34) and displayed (54) (col 13/lines 37-48, 62-col 14/line 4, 19-22, rendered i.e. cause it to be displayed, col 7/lines 2-14) program guide is acquired and





Art Unit: 2142

displayed caused it to be displayed in real time, (col 6/lines 39-59 and col 7/lines 2-14 retrieved and displayed immediately); displayable data stream information including displayable indicia associated with commands (col 3/lines 36-42, col 15/lines 32-42).

It would have been obvious to one ordinary skilled in the art at the time the invention was made to include displayable data stream received in real time including displayable data stream further including future programming, motivation would be to further enhance Harper's composite interactive programming including future graphics message selection and associated commands broadcast as data codes embedded in the conventional video signal may be created to be include in other broadcast programs, as suggested by Harper.

Regarding claim 17, commands include switching the display to a channel associated with the future programming (Coleman: dedicated channel for current programming prior art, col 1/lines 56-65, guide enable user's to switch to a channel associated with the displayed guide, col 2/lines 62-col 3/line 2, program guide including future programming guide, col 4/lines 60-col 5/line 3, enable user's to switch to a channel associated with the displayed guide, col 3/lines 36-42).

Regarding claim 19, said receiver comprises a satellite data link to download a satellite-broadcasted data stream (Harper: col 3/lines 66-col 4/line 5, satellite connection col 11/lines 3-11) to receive displayable data stream (Harper: col 6/lines 16-47).

Regarding claim 21, displayable data stream including television programming (Harper: simulcast both including conventional television programming: col 2/lines 28-39, Coleman: 1/lines 17-30 an including future program schedule information associated with television programming), where schedule program information include commands associated with displayable indicia (Coleman: displayable data stream including displayable indicia associated with commands (col 3/lines 36-42, col 15/lines 32-42).

Regarding claim 22, command is stored (Harper: col 26/lines 47-49) and a processor (36, 48 of Fig. 2) (driver) for coordinating the memory (50 of Fig. 2) (cache) and the future program schedule information (Coleman: col 13/lines 62-col 14/line 22 regarding mentioned Fig. 2).

Regarding claim 23, satellite data link (Harper: col 6/lines 16-25, satellite data link (150), col 3/lines 66-col 4/line 5, modem (312), col 10/lines 1-15).





Art Unit: 2142

Regarding claim 25, comprises the method for commanding the set-top box apparatus claimed on claims 16 and/or 34 rejected for obviousness under U.S.C. 103, this same rationale is also applied to method claims, claimed in terms of function, property or characteristic.

Regarding claims 26, 28, and 30-32 comprising the method associated with the set top box apparatus are substantially the same as discussed on claims 17, 19, and 21-23, respectively, rejected for obviousness under U.S.C. 103, this same rationale is also applied to method claims, claimed in terms of function, property or characteristic.

6. Claims 18, 20, 24 and 27, 29 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harper et. al. (Harper) in view of Coleman et. al. (Coleman) U.S. Patent No. 5,844,620 in further view of Eyer U.S. Patent No. 5,982,445.

Regarding claims 18, 20 and 24, said multimedia includes received by satellite data link, as discussed above, however the above-mentioned prior art does not explicitly teach where said multimedia received by satellite data link comprises web pages in a markup language.

Eyer teach receiving by a television receiver display data (col 5/lines 13-26), said display data coded according to a markup language (e.g. HTML), display data also including future program scheduling information (col 4/lines 33-57) by a satellite data link receiver by a television receiver (col 8/lines 39-52);

It would have been obvious to one ordinary skilled in the art at the time the invention was made to provide a scheme for adapting existing transmission and receiving equipment including set-top decoders and communication protocols such as those for transmission of digital television signals via satellite and/or cable plants for the display of web pages in view of its rapidly increasing use, as suggested by Eyer.

Regarding claims 27, 29, and 33 comprising the method associated with the set top box apparatus are substantially the same as discussed on claims 18, 20, and 24, respectively, rejected for obviousness under U.S.C. 103, this same rationale is also applied to method claims, claimed in terms of function, property or characteristic.





Art Unit: 2142

#### Response to arguments

7. Applicant argues (a) prior art of record does not teach claim limitation as recited, specifically, displayable indicia is associated with commands at the head end and provided as part of future programming information in a displayable data stream.

In response to argument a, prior art teaches displayable indicia from server (30) including reminder/record tags, i.e. displayable indicia associated with commands executable when selected (128, 130, 132, 134, 138 or 140) (col 4/lines 11-22, Figs. 6, and 8-9, and provided as part of the program time guide (future programming information));

displayable indicia from server (32) including on-demand digitized video information including video clips i.e. displayable indicia associated with commands executable when selected (128 130, 132, 134, 138 or 140) (col 4/lines 24-35 and provided as part of future programming information, Figs. 3 and 6);

displayable indicia from server (34) includes (future) program schedule information, also including a link to a video preview or close caption, i.e. displayable indicia associated with commands executable when selected (col 4/lines 36-51, preview window (110), icons and record/reminder tags, and provided as part of future programming information, col 8/lines 35-53, Figs. 3 and 6); and

displayable indicia associated with commands delivered from the head end (col 7/lines 20-63) wherein displayable indicia includes a program time guide (col 52-58, 63-col 10/line 9) including program grid (80) and focus frame (102), i.e. displayable indicia associated with commands (col 8/lines 5-17, col 10/lines 25-50) including actions to be executed when displayable indicia is selected;

In this manner prior art teaches displayable indicia combined (pre-associated) with actions or executable operations (command) at a head end and provided as part of program schedule information including a program time guide (future programming) in a displayable data stream.

- 8. Applicant arguments filed 09/06/02 have been fully but not found persuasive.
- THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.





Art Unit: 2142

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prieto, B. whose telephone number is (703) 305-0750. The Examiner can normally be reached on Monday-Friday from 6:00 to 3:30 p.m. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's Supervisor, Mark H. Rinehart can be reached on (703) 305-4815. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-6606. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3800/4700.

Any response to this final action should be mailed to:

#### **Box AF**

Commissioner of Patents and Trademarks Washington, D.C. 20231

#### or Faxed to:

(703) 746-7238 for TC 2100 Official After-final communications; please mark "EXPEDITED PROCEDURE", and

(703) 746-7239 for other TC 2100 Official communications.

or:

(703) 465-7240 for Non-Official, Draft communications, status query, please label "PROPOSED" or "DRAFT".

### Or Telephone:

(703) 306-5631 for TC 2100 Customer Service Office

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

B. Prieto
GAU 2142/TC 2100
Patent Examiner
November 7, 2002

MARK H. RINEHART SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2100